

This method embodiment further comprises the step of assigning an object identifier to the object. The object identifier includes at least a simple name of the object and a home of the object. Generally, the entire object identifier (i.e., the simple name followed by the home of the object) represents a fully qualified resource identifier for the resource represented by the object. A user may assign the simple name to the object, or alternatively, the discover mechanism can automate the process of assigning the simple name to an object for example by using the serial number of the resource (e.g., the serial number of a data storage system) as the simple name. A graphical user interface operating in accordance with the embodiment of the invention will display the simple name assigned to an object uniquely for that object. Furthermore, a simple name for an object will be unique for that object in that object's home context. The home context of the object is defined by the home of the object within the resource identifier for the object. The home of the object represents or references another object (e.g., a parent object, as will be explained) in a set of objects (e.g., preferably an object hierarchy) to which the created object relates.

The method embodiment further includes the step of displaying at least one representation of the object on a graphical user interface. Each representation of the object including the simple name of the object. As will explained, even though an object hierarchy is used to hierarchically arrange objects in relation to other objects, a object can appear in more than one location in the object hierarchy. However, since each representation of the object in a graphical user interface includes at least the simple name of the object, then a user of the graphical user interface can immediately view the object hierarchy and can see, for each representation of each object, the simple name for that object.

In addition, in this method embodiment, if a home condition (to be explained) exists for one of the representations of the object(s) displayed on the graphical user interface, those representations of objects (for which a home condition exists) further include the home of the object. If a home condition does not exist for representation(s) of object(s) displayed on the graphical user interface, then those representation(s) do not include the home of the object. In other words, as representation of the object are

displayed, rendered or otherwise provided on a graphical user interface operating according to this embodiment, if a home condition exists or occurs for a particular representation of an object on the graphical user interface, then that representation will include both the simple name and the home of the object, such that the representation is displayed on the graphical user interface in a fully qualified manner.

In another embodiment, the method includes the step of associating the object with at least one location within an object hierarchy such that the object becomes a child object of at least one parent object in the object hierarchy. The object hierarchy represents relationships between resources in the computing system environment which are represented by objects in the object hierarchy. Thus, an object hierarchy is formed (or inherently exists) by hierarchical relationships formed between each resource, and the object that represent those resources contain references (e.g., pointers or inheritances of classes of other objects) for those relationships. At least one location to which the object is associated in the object hierarchy includes a home location identifying a home object in object hierarchy under which the object is initially associated as a child object, so as to define a home context for the object. Thus, in one embodiment, the object is created within an object hierarchy and a child object from which that object descends from in the hierarchy becomes the home object of the newly created object. This home area (i.e., the level in the hierarchy in which the object is created) becomes the home context for this object. Since the simple name is unique in the home context, the simple name will uniquely identity this object its home context.

Thus, in preferred embodiments, a home condition exists for a representation of an object displayed on the graphical user interface if displaying that representation of the object at that location in an object hierarchy in the graphical user interface causes one of i) the object to be displayed out of a home context of the object and/or ii) the object to be displayed non-uniquely in a context in which the object is displayed. Accordingly, the occurrence of a home condition causes for a representation of the object causes that representation to be displayed in a qualified manner (i.e., including both the simple name and the home of the object) in that location in the object hierarchy in the graphical user interface.

This allows a user of the graphical user interface to know or understand the true identity of the object (i.e., its fully qualified identity) no matter where the representation of that object is displayed in the object hierarchy in the graphical user interface.

Embodiments of the invention thus makes it intuitively obvious for a user to understand what an object name (i.e., its representation in the graphical user interface) means without having to learn hierarchical naming schemes or pathname structures and avoids requiring the user to think about the object hierarchies in great detail.

Furthermore embodiments of the invention minimizes typing required by a user since the user only need to specify a simple name for an object in the objects home context or in other areas where a home condition does not exist such that the simple name will uniquely identify that object in that context, without requiring complex pathnames. If the identity of the object must be fully qualified, the user still only need to then also supply the home of the object, which can also be a simple name of the home object for the object being identified. Thus, to uniquely identify an object anywhere ion the object hierarchy, the user only need to provide, at most, two simple names and a joiner character such as an "@" symbol. The syntax then for fully qualifying the identity of an object can be, for example object-simple-name@home.

Still further, embodiments of the invention do not require a user to setup a naming scheme other than names user chooses. Since each object identifier includes the simple name, which can be user defined, and the home of an object is the simple name of another object to which that new object relates, a user can determine at his or her discretion both the simple name for the object and the home of the object (another simple name of another object, the home object).

The naming scheme provided by embodiments of this invention and provide a naming context that is sufficient for a management software application or system to identify an object in any context, or in other words, in any location within the object hierarchy.

Preferred embodiments also show representations of objects using the simple name followed by the home of the object. This shows the important part of object identifier - the simple name that quickly, and in many cases uniquely, identifies the